

**METHOD FOR USING AN ACCESS CARD TO CREATE  
A SECURE SUB-NETWORK ON A PUBLIC NETWORK**

**Abstract**

10       A method for creating a secure sub-network on a  
public network that includes a set of devices. The  
secure sub-network is to include a subset of devices from  
among the set of devices. An access card is provided  
having a first private key comprised thereon. The access  
15 card is scanned to determine the first private key, by  
the subset of devices. A master device is determined  
from among the subset of devices. A second private key  
is selected and a public key is computed based on the  
second private key, by the master device. The second  
20 private key is only known to the master device. The  
public key is sent to the set of devices, by the master  
device. A shared encryption key is computed, and an  
encryption is requested of any subsequent messages  
between any of the devices comprising the subset of  
25 devices using the shared encryption key.